Initial Startup Issues

Control adjustments to the overfire air system are expected during the initial ascent to full load. During the first week of operation, while turbine balance and overspeed issues are being addressed, technical support personnel from BPI Inc., the OFA designers will be on-site to assist ES in optimizing the OFA system.

Startup screens are being placed in the turbine stop valves and the BFPT main steam stop valves to protect this equipment from solid particles that were not removed in the boiler component cleaning phase prior to installation. Tentative plans call for a short unit outage after approximately one week of operation to remove all startup screens.

Operational Guidelines

The OFA system is designed to operate without the need for constant operator attention. Control of combustion air flows and overfire air flows will be maintained within the existing CCS system. Computer manual control is available at all times.

The operational interface with the OFA system will consist of three Videospec screens.

1. The first screen will display both current system operational parameters (i.e. flow, temperatures, etc.) and provide master control of the OFA system.
2. The second screen will allow control of the 1/3 and 2/3 port dampers.
3. The third screen allows control of the new OFA compartment dampers (4 ea.)

In accordance with OEM specifications the OFA port dampers will be controlled as follows:

Load	Port Dampers	Compartment Dampers
0-60%	5% (port cooling)	5% (port cooling)
60% - 75%	1/3 dmpr. open, 2/3 dmpr. closed	Open
75% - 90%	2/3 dmpr. open, 1/3 dmpr. closed	Open
90% - 100%	All open	Open

(Modifications to this guideline will likely be forthcoming as CO emissions and unburned carbon levels are verified in operational testing.)

The OFA system consists of the addition of 16 ports in the furnace directly above the top row of burners, (9^{th} level). Eight ports installed in the front wall and eight in the rear wall. These ports will each be designed with parallel 1/3 and 2/3 dampers. Each of the two rows of ports will be outfitted with windbox compartment dampers at each end of the respective windbox compartment.

The OFA system extracts a portion of the combustion air normally fed into the existing burner windbox compartments. The percent of total combustion air fed into the OFA